

## What Is Claimed Is:

1. A computer-implemented method of financial instrument trading, the method comprising:  
calculating a financial risk associated with a first financial instrument based on a pricing  
volatility model;  
5 generating an order to hedge the first financial instrument by acquiring a second financial  
instrument at a target price that is determined based on the pricing volatility model;  
and  
transmitting the order to an exchange.
2. The method of claim 1 wherein acquiring the second financial instrument comprises  
10 acquiring a position selected from the group consisting of a short position and a long  
position in the second financial instrument.
3. The method of claim 1 wherein the order to hedge comprises an order to acquire a second  
financial instrument having a valuation behavior acting to offset valuation change of the  
first financial instrument.
- 15 4. The method of claim 1 wherein:  
the order comprises a buy order at a target price less than the current asking price;  
the method further comprises generating a second order to hedge comprising a sell order  
to sell the second financial instrument at a target price greater than the current bid  
price for the second financial instrument, and  
20 transmitting the order further comprises transmitting the buy and the sell order to the  
exchange such that both the buy and the sell order are simultaneously pending and  
execution of the buy or sell order is determined based on price movement of the  
second financial instrument.

5. The method of claim 1 further comprising automatically generating a subsequent order to acquire the second financial instrument in response to a change in the pricing volatility model.
6. The method of claim 5 wherein the first financial instrument comprises an option on an underlying stock and the second financial instrument comprises the underlying stock.
7. The method of claim 6 wherein the model is based on a first derivative of the option price with respect to a first derivative of the underlying stock price.
8. The method of claim 1 wherein the financial risk comprises a risk associated with pricing volatility of the first financial instrument.
9. A financial instrument trading system comprising:
  - a terminal interface coupling the system to a plurality of trading terminals;
  - a trading network interface coupling the system to a financial instrument trading exchange;
  - a hedging engine operatively coupled to the terminal interface and to the trading network interface and configured to receive hedging data from ones of the trading terminals and to transmit buy and sell hedging orders to the financial instrument trading exchange, the hedging engine comprising stored instructions to configure generation of successive stages of buy and sell hedging orders, each of the buy and sell orders comprising a price determined based on a volatility model associated with a financial instrument and a reference price for the financial instrument, the reference price being adjustable for each of the successive stages.

10. The system of claim 9 wherein the system further comprises a portfolio management system and the hedging engine further comprises stored instructions to configure the hedging engine to retrieve data identifying each of a plurality of financial instruments held in a first account and to assess risk associated with each of the plurality of financial instruments based on the volatility model.
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11. A computer-implemented method of financial instrument trading, the method comprising: calculating a financial risk associated with a first financial instrument based on a pricing volatility model;
- in a first hedging stage,
- 10 generating a first buy order and a first sell order each for a second financial instrument having a valuation that is correlated with the valuation of the first financial instrument, the first buy order comprising a buy target price and a buy quantity and the first sell order comprising a sell target price and a sell quantity, the buy and the sell target price and the buy and the sell quantity each being
- 15 automatically determined based on an initial volatility value determined from the pricing volatility model so as to enable hedging of the financial risk;
- transmitting the first buy and the first sell order to an exchange;
- receiving a notification from the exchange that one of the first buy order or the first sell order has been filled by the exchange and then canceling the unfilled one of
- 20 the first buy order or first sell order; and
- in each of a plurality of subsequent hedging stages,
- generating another buy and another sell order each for the second financial instrument based on a volatility value received from a trader and on a reference price at which a previous buy or previous sell order was filled by the exchange during a
- 25 previous hedging stage and on a model adjusting the buy or sell order based on trending of the market with respect to the second financial instrument;
- transmitting said buy and said sell order to the exchange;

receiving a notification from the exchange that one of said buy or sell orders has been filled by the exchange and then canceling the unfilled one of the buy order or sell orders.

12. The method of claim 11 wherein the first instrument comprises an option on an  
5 underlying stock and the second instrument comprises the underlying stock.

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